WO99/10613

PCT/CH98/00346

Claims

Reinforcing device for supporting structures (1) with CFK panel (2) characterized in that at least one end of CFK panel (2) is split into at least two strips (2') and terminates in an end element (3, 4; 12, 13).

- 2. Reinforcing device according to Claim 1 characterized in that each of the two ends of CFK panel (2) terminates in an end element (3, 4; 12, 13).
- 3. Reinforcing device according to Claim 1 or 2 characterized in that the strips (2') are inserted at least partially into retaining slots (9; 9') of end element (3, 4; 12, 13) that are preferably located wedgewise relative to one another.
- 4. Reinforcing device according to one of Claims 1 to 3 characterized in that the panel ends (2') are split into superimposed strips of approximately equal thickness.
- 5. Reinforcing device according to one of Claims 1 to 4 characterized in that retaining slots (9) of end element (3, 4; 12, 13) have a rough or corrugated surface.
- 6. Reinforcing device according to one of Claims 1 to 5 characterized in that bores (10) located transversely to the surface of the panel are located in end element (3) in the vicinity of retaining slots (9).
- 7. Reinforcing device according to one of Claims 1 to 6 characterized in that the end element (3,\4; 12, 13) is a parallelepiped made of metal or plastic.
- 8. Reinforcing device according to one of Claims 1 to 7 characterized in that the end element (3, 4; 12, 13) in the vicinity of the outlet of the CFK panel (2) has reinforcing devices (11), preferably threaded bolts, located transversely to the outlet direction.
- 9. Reinforcing device\according to one of Claims 1 to 8 characterized in that the end element (3, 4; 12, \13) has a force-introduction point, preferably a threaded bore (12) opposite the outlet of the CFK panel.
- 10. Reinforcing device according to one of Claims 1 to 9 characterized in that the retaining slots (9) are located wedgewise in end element (3, 4; 12, 13) in such fashion that the lowest retaining slot (9') is parallel to the outlet direction of



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- panel (2) and the other retaining slots (9) are each located fanwise with an increasing angle from the outlet opening.
- Method for reinforcing supporting elements (1) with reinforcing devices according to one of Claims 1 to 10 characterized in that the CFK panels (2) cut to the appropriate length are separated or split at at least one end into at least two strips (2') of approximately the same thickness or width and are brought into a connection with an end element (3, 4; 12, 13) and this arrangement is glued to the tension side of the supporting element (1) to be reinforced.
- 12. Method according to Claim 11 characterized in that the strips (2') of CFK panel (2) are introduced into separate retaining slots (9, 9') of an end element (3, 4; 12, 13) preferably arranged fanwise with respect to one another and glued there or soaked with an adhesive.
- 13. Method according to Claim 11 or 12 characterized in that the ends of the CFK strips (2) are each separated or split into three strips (2') and the arrangement, before gluing with supporting element (1), is pretensioned relative to the latter by clamping means (7, 8) and then glued in the pretensioned state to supporting element (1).
- 14. Method according to one of Claims 11 to 13 characterized in that the CFK panel (2) is split in the fiber direction.

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